

## ABSTRACT

In a system and method for efficient transport of streaming data over MPLS, incoming data is multiplexed to generate a single data stream. A composite data stream is then generated by selectively combining certain packets of the single data stream with an IP header or generating new packets with a full IP header at a predetermined timing interval, and transmitted to a first MPLS converter that assigns a MPLS label to data packets in the composite data stream, in accordance with information from said IP header. The composite data stream is then transported and routed to a second MPLS converter, via a MPLS network, that strips the MPLS labels from the data packets. A discriminator separates the stripped, combined data stream into non-IP header data output via a demultiplexer to generate multiple outgoing data streams, and IP header data output to a traffic monitor that controls said routing mechanism.